

Claims

What is claimed is:

- sub B> 1. A connector for a respiratory assembly, comprising:
- a body having a first end and a second end, said body having a passage disposed therethrough from said first end to said second end to allow for transport of fluids and objects through said body, said passage changing direction approximately 120° between said first end and said second end, wherein said first end includes a coupling configured to rotatably engage a first member of the respiratory assembly, wherein said second end includes a coupling configured to rotatably engage a second member of the respiratory assembly.
- 5 2. The connector for a respiratory assembly of claim 1, wherein the first member is a tracheal tube and the second member is a ventilating tube.
3. The connector for a respiratory assembly of claim 1, wherein said first and second end couplings include hollow female bell housings.
4. The connector for a respiratory assembly of claim 3, wherein:
- said first end coupling includes a first sleeve within said bell housing, the entire circumference of said first sleeve is rotatable with respect to said first end so that said first sleeve remains in rotating engagement with said first end, said first sleeve sized for

10037443-1E2101

5 receipt of the first member therein such that said first end rotatably engages the first member; and

said second end coupling includes a second sleeve within said bell housing, the entire circumference of said second sleeve is rotatable with respect to said second end so that said second sleeve remains in rotating engagement with said second end, said
10 second sleeve sized for receipt of the second member therein such that said second end rotatably engages the second member.

5. The connector for a respiratory assembly of claim 4, wherein:

said first sleeve has a first annular sealing member on one end thereof for engagement with a first annular rib on said first end, engagement between said first annular sealing member and said first annular rib causes deflection of said first annular
5 sealing member to create an essentially hermetic seal between said first sleeve and said first end; and

said second sleeve has a second annular sealing member on one end thereof for engagement with a second annular rib on said second end, engagement between said second annular sealing member and said second annular rib causes deflection of said
10 second annular sealing member to create an essentially hermetic seal between said second sleeve and said second end.

6. The connector for a respiratory assembly of claim 5, wherein:

said first and second ends each having a stepped annular ring; and

10037443 "123101
FOOTNOTES

further comprising a first and second retainer disposed in said respective annular rings for retaining said first and second sleeves in engagement with said respective first and second ends.

7. The connector for a respiratory assembly of claim 1, wherein said body, said first end, and said second end are plastic, are made by injection molding, and are substantially transparent.

8. The connector for a respiratory assembly of claim 1, wherein the first member is a tracheal tube and the second member is a humidifier tube.

9. A connector for a respiratory assembly, comprising:

a first section being substantially cylindrical in shape, said first section having a first axis, said first section having a first passage therethrough to allow for transport of fluids and objects through said first section, said first section rotatably engageable with a first member of the respiratory assembly;

a second section being substantially cylindrical in shape and being connected to said first section, said second section having a second axis, said second section having a second passage therethrough in communication with said first passage to allow for transport of fluids and objects through said second section, said second section rotatably engageable with a second member of the respiratory assembly; and

wherein an angle of greater than 90° and less than 180° exists between said first

10037443-13310
T.0223T "E442E00T

axis and said second axis.

10. The connector for a respiratory assembly of claim 9, wherein said angle is about 120°.

11. The connector for a respiratory assembly of claim 9, wherein the first member is a tracheal tube and the second member is a ventilating tube.

12. The connector for a respiratory assembly of claim 9, wherein said first and second sections have hollow female bell housings.

13. The connector for a respiratory assembly of claim 12, further comprising:
a first sleeve within said bell housing in said first section, the entire surface of said first sleeve is rotatable with respect to said first section so that said first sleeve remains in rotating engagement with said first section, said first sleeve sized for receipt of the first member therein such that said first section rotatably engages the first member; and

a second sleeve within said bell housing in said second section, the entire surface of said second sleeve is rotatable with respect to said second section so that said second sleeve remains in rotating engagement with said second section, said second sleeve sized for receipt of the second member therein such that said second section rotatably engages the second member.

1003744-132101
"E442E001"

14. The connector for a respiratory assembly of claim 13, wherein:

said first sleeve has a first annular sealing member on one end thereof for engagement with a first annular rib on said first section, engagement between said first annular sealing member and said first annular rib causes deflection of said first annular sealing member to create an essentially hermetic seal between said first sleeve and said first section; and

said second sleeve has a second annular sealing member on one end thereof for engagement with a second annular rib on said second section, engagement between said second annular sealing member and said second annular rib causes deflection of said second annular sealing member to create an essentially hermetic seal between said second sleeve and said second section.

15. The connector for a respiratory assembly of claim 14, wherein:

said first and second sections each having a stepped annular ring; and

further comprising a first and second retainer disposed in said respective annular rings for retaining said first and second sleeves in engagement with said respective first and second sections.

16. The connector for a respiratory assembly of claim 9, wherein said first and second sections are plastic and are substantially transparent, said first and second sections are made by injection molding.

10037443-123101

18. A connector for a respiratory assembly, comprising:

a first female bell housing connected to said first end having a first annular rib;

a first sleeve disposed within said first female bell housing, said first sleeve having a first annular sealing member configured to engage said first annular rib and effect a hermetic seal between said passageway and the outside of the respiratory assembly;

a second sleeve disposed within said second female bell housing, said second sleeve having a second annular sealing member configured to engage said second annular rib and effect a hermetic seal between said passageway and the outside of the respiratory assembly;

wherein said first sleeve is adapted to engage a first member of the respiratory assembly and permit rotational motion between said body and the first member of the respiratory assembly; and

wherein said second sleeve is adapted to engage a second member of the
20 respiratory assembly and permit rotational motion between said body and the second
member of the respiratory assembly.

10037443-129101
TOTAL 2007